## **AMENDMENTS TO THE CLAIMS:**

- 1. (Canceled)
- 2. (Canceled)
- 3. (Canceled)
- 4. (Canceled)
- 5. (Canceled)
- 6. (Canceled)
- 7. (Canceled)
- 8. (Canceled)
- 9. (Canceled)
- 10. (Canceled)
- 11. (Canceled)
- 12. (Canceled)
- 13. (Canceled)
- 14. (Canceled)
- 15. (Canceled)
- 16. (Canceled)
- 17. (Canceled)
- 18. (Canceled)
- 19. (Canceled)
- 20. (Canceled)

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21. (Canceled)

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- 22. (Canceled)
- 23. (Canceled)
- 24. (Canceled)
- 25. (Canceled)
- 26. (Canceled)
- 27. (Canceled)
- 28. (Canceled)
- 29. (Canceled)
- 30. (Canceled)
- 31. (Canceled)
- 32. (Canceled)
- 33. (Canceled)
- 34. (Canceled)
- 35. (Canceled)
- 36. (Canceled)
- 37. (Canceled)
- 38. (Canceled)
- 39. (Canceled)
- 40. (Canceled)
- 41. (Canceled)

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- 42. (Canceled)
- 43. (Previously presented) A two-cycle fuel additive comprising;

a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;

- a carotenoid; and
- a thermal stabilizer.
- 44. (Previously presented) The additive of claim 43 wherein the carotenoid is selected from the group consisting of β-carotene, αcarotene, lycopene, leutin, betatene and mixtures thereof.
- 45. (Previously presented) The additive of claim 43, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof
- 46. (Previously presented) The additive of claim 43 wherein the plant oil extract is derived from barley and the carotenoid is β-carotene.
- 47. (Previously presented) The additive of claim 43 wherein the thermal stabilizer is meadowfoam oil.
- 48. (Previously presented) The additive of claim 43 further comprising a diluent.
- 49. (Previously presented) The additive of claim 48 wherein the diluent is selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, two-cycle fuel, jet fuel, two-cycle fuel, 2 cycle oil, two-cycle fuel and mixtures thereof.
- 50. (Previously presented) The additive of claim 43 further comprising at least one additive selected from the group selected

from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.

- 51. (Canceled)
- 52. (Previously amended) A two-cycle fuel comprising a base fuel and at least one addition wherein the additive comprises:
  - a plant oil extract derived from grain;
  - a carotenoid; and
  - a thermal stabilizer.
- 53. (Previously presented) The two-cycle fuel of claim 52, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.
- 54. (Previously presented) The two-cycle fuel of claim 52 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
- 55. (Previously presented) The two-cycle fuel of claim 52, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
- 56. (Previously presented) The two-cycle fuel of claim 52 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.

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57. (Previously presented) The two-cycle fuel of claim 52 wherein the thermal stabilizer is meadowfoam oil.

- 58. (Previously presented) The two-cycle fuel of claim 52 further comprising a diluent.
- 59. (Previously amended) The two-cycle fuel of claim 58 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, two-cycle fuel, jet fuel, two-cycle fuel, 2 cycle oil and two-cycle fuel and mixtures thereof.
- 60. (Previously presented) The two-cycle fuel of claim 52 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
- 61. (Canceled)
- 62. (Canceled)
- 63. (Canceled)
- 64. (Canceled)
- 65. (Canceled).
- 66. (Canceled)
- 67. (Canceled)
- 68. (Canceled)

- 69. (Canceled)
- 70. (Currently amended) A two-cycle fuel comprising a base feed and at least one additive wherein the additive comprises:

a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;

- a carotenoid; and
- a thermal stabilizer.
- 71. (Previously presented) The two-cycle fuel of claim 76 wherein the carotenoid is selected from the group consisting of β-carotene, α-carotene, lycopene, leutin, betatene and mixtures thereof.
- 72. (Previously presented) The two-cycle fuel of claim 76, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
- 73. (Previously presented) The two-cycle fuel of claim 70 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
- 74. (Previously presented) The two-cycle fuel of claim 70 wherein the thermal stabilizer is meadowfoam oil.
- 75. (Previously presented) The two-cycle fuel of claim 70 further comprising a diluent.
- 76. (Previously presented) The two-cycle fuel of claim 70 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, two-cycle fuel, jet fuel, two-cycle fuel, 2 cycle oil and two-cycle fuel and mixtures thereof.

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77. (Previously presented) The two-cycle fuel of claim 70 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.

## 78. (Canceled)

- 79. (New) A two-cycle fuel additive comprising:
  a plant oil extract derived from barley;
  β-carotene; and
  a thermal stabilizer.
- 80. (New) The two-cycle fuel additive of claim 79 wherein the thermal stabilizer comprises meadowfoam oil.
- 81. (New) The two-cycle fuel additive of claim 79 further comprising a diluent.
- 82. (New) The two-cycle fuel additive of claim 79 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, two-cycle fuel, diesel fuel, jet fuel, gasoline and mixtures thereof.
- 83. (New) The two-cycle fuel of claim 79 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers,

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carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.

- 84. (New) A two-cycle fuel additive comprising:
  - a hydrophobic plant oil extract;
  - a carotenoid;
  - a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof; and

a solvent selected from the group consisting of tolune, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, diesel fuel, jet fuel, two-cycle fuel, gasoline, resid fuel and mixtures thereof.

- 85. (New) The two-cycle fuel of claim 84 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
- 86. (New) The additive of claim 83, wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
- 87. (New) The additive of claim 34 wherein the plant oil extract is barley oil extract, and the carotenoid is  $\beta$ -carotene.
- 88. (New) The additive of claim 34 further comprising meadowfoam oil.

89. (New) A two-cycle fuel comprising a base fuel and at least one additive wherein the additive comprises:

a plant oil extract derived from grain or a member of the Leguminosue family;

- a carotenoid; and
- a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil, castor oil and mixtures thereof.
- 90. (New) The two-cycle fuel of claim 89 wherein the plant oil extract is barely oil extract and the carotenoid is β-carotene.

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